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AMSAT NEWS SERVICE
ANS-025

The AMSAT News Service bulletins are a free, weekly news and information service of AMSAT North America, The Radio Amateur Satellite Corporation. ANS publishes news related to Amateur Radio in Space including reports on the activities of a worldwide group of Amateur Radio operators who share an active interest in designing, building, launching and communicating through analog and digital Amateur Radio satellites.

The news feed on http://www.amsat.org publishes news of Amateur Radio in Space as soon as our volunteers can post it.

Please send any amateur satellite news or reports to:
ans-editor at amsat.org.

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ANS-025 AMSAT News Service Weekly Bulletins

AMSAT News Service Bulletin 025.01
  From AMSAT HQ Kensington, MD.
January 25, 2015
To All RADIO AMATEURS
BID: $ANS-025.01

Listen In To Radar Observations of Near-Earth Asteroid 2004 BL86

On 2015 January 26, the near-Earth asteroid 2004 BL86 will pass within 0.008 AU of Earth (3.1 times as far away as the Moon). This will be the closest approach to Earth by this asteroid for at least the next 240 years.

As part of an extensive campaign of radar observations to learn about BL86’s shape, spin state, and surface; and to refine knowledge of its trajectory; the Arecibo Observatory’s S-band planetary radar plans to illuminate the asteroid with a continuous-wave signal over 2015 January 27 03:45 – 04:00 UTC. Over that time, BL86’s radar echo will be received by elements of the Very Long Baseline Array and the Very Large Array in New Mexico. Anyone with an antenna and receiver capable of detecting the echo is welcome to listen in.

BL86 will be above the horizon for most observers in North and South America, and for some parts of western Europe and western Africa. To readily detect its

radar echo, observers should have an antenna with an effective collecting area
of at least 10 square meters. BL86 will be moving rapidly across the sky. Over
Jan 27 03:45 – 04:00, it will move by ~0.5º. The asteroid's exact position on
the sky will depend on where it is observed from as well as the time, but will
be near (RA,Dec) = (130º,+17º). A current ephemeris can be obtained from JPL's
Horizons system:
http://ssd.jpl.nasa.gov/?horizons.

The Arecibo transmission will be tuned to give a nominal echo center frequency
of exactly 2380 MHz at geocenter. Without correction for Earth's rotation,
BL86's radar echo will appear as slowly-drifting and within 15 kHz of 2380 MHz.
Predicted echo frequency as a function of time for a given location can be
obtained on-request by emailing Michael Busch (mbusch(a)seti.org). We expect an
echo bandwidth of 6 Hz or less.

Details of the BL86 radar observing campaign at the Arecibo Observatory, NASA's
Goldstone Solar System Radar facility, and the National Radio Astronomy
Observatory are available at:
http://echo.jpl.nasa.gov/asteroids/2004BL86/2004BL86_planning.html.

[ANS thanks JPL for the above information]

SKN on OSCAR Best Fist Nominations Due

Thanks to all who participated in AMSAT's Straight Key Night on OSCAR 2015. If
you haven't already done so, please take a moment to nominate someone you worked
for Best Fist. Your nominee need not have had the best fist of those you heard,
only of those you worked.

Send your nomination to w2rs(a)amsat.org

[ANS thanks Ray, W2RS, for the above information]

Upcoming ARISS Contact

An International Space Station school contact has been planned with participants
at Masakame" event, Shibuya, Japan on 24 Jan. The event is scheduled to begin at
approximately 14:21 UTC. The duration of the contact is approximately 9 minutes
and 30 seconds. The contact will be direct between NA1SS and JK1ZRW. The contact
should be audible over Japan and adjacent areas. Interested parties are invited

to listen in on the 145.80 MHz downlink. The contact is expected to be conducted
in English.

Japan Broadcasting Corp. (NHK) are televising a regular science program Masakame
(means Good Heavens) for young people and their parents.

  Aa special program focusing ARISS program and Amateur radio satellites, etc. on
  2015-02-28 on air, with video record of ARISS school contact. Members of
  contact are TV talent (who has a amateur radio license) and high school
  students (age 15 to 18).

[ANS thanks David, AA4KN, for the above information]

Containerized Satellite Survey

Bungo Shiotani is a Ph.D. student working with Dr. Norman Fitz-Coy at the University of Florida. He is requesting your assistance with this survey to assess the potential impact that containerized satellite have on the debris population in low Earth orbit. The results will be used as part of his Ph.D. dissertation to create a statistical database and to quantify the growth of debris population. The hope is the outcome will increase the awareness to the
community regarding the potential growth of debris population due to containerized satellites.

Your identify will not be collected unless you choose to disclose it in the survey. Additionally, if you would like the results sent directly to you, please
disclose your contact information when requested in the survey.

Please respond to this survey by Friday, February 27th 2015. The survey should
take less than 30 minutes to complete.

Survey link: https://ufl.qualtrics.com/SE/?SID=SV_8CYyyDTFUGKHFbL

Please forward this information to other members of the space community.

If you have any questions, comments, or concerns, please feel free to contact:

Bungo Shiotani
Graduate Researcher
bshiota(a)ufl.edu

Dr. Norman Fitz-Coy
Research Advisor
nfc(a)ufl.edu

[ANS thanks Bungo Shiotani for the above information]

Search for NASA Educational Resources With New Search Tool

Are you looking for a lesson plan about the planet Jupiter? Do you need a poster with information about the Wright Brothers' first flight? Or maybe you're hunting for a website with information about NASA's deep space missions. NASA Education has a new tool to help you in your search!

NASA's new Educational Resource Search Tool can help you find lesson plans, posters, educator guides and other materials to supplement your science, technology, engineering and mathematics curriculum. Search hundreds of resources by subject, grade level, type and keywords.

To check out the new search tool and begin your educational resource hunt, visit http://www.nasa.gov/education/materials/

[ANS thanks the NASA Education Express Message -- Jan. 22, 2015 for the above information]

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In addition to regular membership, AMSAT offers membership in the President's Club. Members of the President's Club, as sustaining donors to AMSAT Project Funds, will be eligible to receive addi-tional benefits. Application forms are available from the AMSAT Office.

Primary and secondary school students are eligible for membership at one-half the standard yearly rate. Post-secondary school students enrolled in at least half time status shall be eligible for the stu-dent rate for a maximum of 6 post-secondary years in this status. Contact Martha at the AMSAT Office for additional student membership information.

73,
This week's ANS Editor,
Lee McLamb, KU4OS
ku4os at amsat dot org